

Presenting Sagibelius 2.0: Pure Athenian Limited edition



Sagibelius is a set of extensions to Sibelius (versions 4 and up) which enables the use of the Sagittal notation system.

Sagittal notation is a system of arrow-like microtonal accidentals developed by Dave Keenan and George Secor with the intent of notating *every possible tuning system*. The notation is designed to be consistent and intuitive: smaller symbols designate smaller inflections, and every symbol has a vertically mirrored opposite.

Athenian is the medium-precision subset of symbols, which can notate Just Intonation (JI) to ± 3 -cent accuracy, and equal temperaments as high as 224-tET.

The plugins attach the symbols as *accidentals*, i.e. in Sibelius they behave as a sharp or flat would. Here is the complete set of 51 *accidentals* available in Pure Athenian Limited, ordered from flattest to sharpest:



deg. Athenian JI: -42 -26 -23 -22 -21 -20 -19 -18 -17 -16 -15 -14 -13 -12 -11 -10 -9 -8 -7 -6 -5 -4 -3 -2 -1



In Athenian JI, naturals indicate a chain of pure (Pythagorean) fifths, and the apotome (flat/sharp) is divided into 21 degrees. As you can see, the full range from flat to natural to sharp is available. However, in the range between 21 and 42 degrees (to doubleflat/doublesharp), only 3 pairs of symbols are available—that's the 'Limited' part. Symbols for 22, 23 and 26 degrees were chosen for their necessity in notating common JI intervals (see included document).

It is not necessary to understand the whole system to begin using it; start by learning how to notate the intervals you have experience with, and add one symbol at a time. See <http://sagittal.org/> for more resources, and don't be afraid to ask for help!

Installation

1. Install the font "Sagibelius.ttf". This much is sufficient for viewing existing sagittal Sibelius files.
2. Drag "Sagittal Pure Athenian Limited.lib" into Sibelius' House Styles folder.
3. Drag the folder "Sagittal Athenian Limited" into Sibelius' Plugins folder.

Creating a Sagittal Score

There are two key ingredients a sagittal score must have: a sagittal Text Style, and a properly modified Symbols palette. These are contained within the supplied House Style. If you aren't picky about your House Style, start a new score with this one, or import the whole thing onto an existing score (*House Style > Import House Style...*). If you are picky, you can choose to only import Text Styles and Symbols by unchecking the other boxes in the import dialog box.

If all went well, sagittal accidentals will be scattered throughout the Symbols palette of your score. If not, make sure there is a Text Style called "Sagittal" which points to the Sagibelius font.

Using the Plugins

The simplest plugin to use is *Add Sagittal Accidental*. Refer to the "symbols" document for ASCII representations of each symbol. If you select the left measure and apply this plugin using the text `"|/|"`, you will get a measure like the one on the right:



Only noteheads that have no accidental assigned to them are affected. For this reason it's most efficient to add 'natural' pitches to a chord last:



(Naturals sometimes behave erratically and must be hidden.)

The playback effect of the accidentals is a shift by a usually large number of semitones away from the written register. If you are entering notes manually, Sibelius will think you are in a different octave. Octave-shifting notes that have already been treated with sagittal accidentals has unpredictable effects; it is recommended to put all the noteheads in a passage into place before applying the plugins.

If a passage appears squished, use *Layout > Reset Note Spacing* before doing manual adjustments.

The plugin *Add Sagittal (Template)* does the same thing as *Add Sagittal Accidental*, but it is hard-wired to a particular symbol. In this way, one could add additional symbols to the available set, or create keyboard shortcuts for each symbol. It is called (*Template*) because it is meant to be duplicated. For each copy, edit the plugin and follow the instructions in the ReadMeFirst method.

The plugin *Apply (Sagittal) Remapping* is an efficient tool for converting from a keyboard scordatura score to a Sagittal score. One way to do microtonal composition in Sibelius is to route the MIDI signal to a micro-tuned synthesizer. The resulting notation of the needed MIDI pitches is useful for MIDI keyboard performances, but reveals nothing about the tuning itself, especially when the tuning has more or less than 12 pitches per octave.

For example, if your keyboard were set to 19 equal divisions of the octave, a one-octave ultrachromatic scale would look something like this:



To apply a remapping all you need is a line of text containing the way you want to notate your mapping, in ascending order:

C C# Db D D# Eb E E# F F# Gb G G# Ab A A# Bb B B#

The output:



This plugin can operate on entire scores. Remember, plugins can't be undone, so back up your score beforehand, or copy the passage into a new staff.

This plugin is limited to octave-repeating mappings, but within the octave mappings do not have to be ascending!

ENJOY!

In future editions of Sagibelius, look forward to

- complete Spartan subset versions of plugins
- House Styles with the mixed version of sagittal (with traditional sharps and flats)
- a "transpose by octave" plugin

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